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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/393,126	09/10/1999	ROBERTO AIELLO	FANT-99-002	2279

7590 02/12/2004  
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EXAMINER

ABELSON, RONALD B

ART UNIT	PAPER NUMBER
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2666

DATE MAILED: 02/12/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/393,126

Applicant(s)

AIELLO ET AL.

Examiner

Ronald Abelson

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 28 July 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 51-75,88,89 and 93-143 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 51-75,88,89,93-103,106-109,113-127 and 135-143 is/are allowed.
- 6) ☒ Claim(s) 104,105,110,111,128,130,131 and 133 is/are rejected.
- 7) ☒ Claim(s) 112,129,132 and 134 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 9/10/1999 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>23, 24, and 25</u> . | 6) <input type="checkbox"/> Other: _____  |

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***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 104-105, 110, 111, 128, 130, 131, and 133 are rejected under 35 U.S.C. 102(e) as being anticipated by Fullerton (US 6,177,903).

Regarding claims 104, 105, 110, 128, 130, and 133, Fullerton teaches a method an apparatus for an ultra-wideband wireless communication network comprising at least three transceivers (fig. 2), each said transceiver having a transmitter and a receiver, one of said transceivers being structured an configured as a master device (fig. 2 box 206), said master device structured and configured to manage data transmission between said master device and said at least two other transceivers (fig. 2 box 102A,B) and direct data transmission between said at least two

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other transceivers (bandwidth requirements for links 204 depend upon processor 206, col. 5 line 67 - col. 6 line 2), wherein said transmitters are structured and configured to emit radio frequency pulses operating with ultra-wide band wireless technology and said receivers are structured and configured to receive said radio pulses (col. 4 line 35 - 37).

Regarding claim 105, 111, 131, 133, in addition to the limitations previously discussed, the transceivers are structured and configured to transfer data to other transceivers isochronously. See fig. 2, the communication links 104 are all two-way.

Regarding claims 110, 128, 130, 133, in addition to the limitations previously discussed, each transceiver further comprises a framing controller, said framing controller having means for generating and maintaining time frame information for said network system (fig. 2 box 202A,B, col. 1 line 67). Note, given the transceivers are time modulated, then a framing controller having means for generating and maintaining time frame information must exist.

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Regarding claim 128, in addition to the limitations previously discussed, said transceivers are structured and configured to emit and receive RF pulses operating with baseband wireless technology (fig. 2, box 102, 206, col. 4 lines 35-36).

***Allowable Subject Matter***

3. Claims 51-75, 88, 89, 93-103, 106-109, 113-127, and 135-143 are allowed.
4. Claims 112, 129, 132, and 134 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Regarding claim 51, 93, 106, 113, 118, 121, 135, 136, 138, 139, 141, and 143, Fullerton teaches an ultra-wideband wireless communication network comprising at least three transceivers (fig. 2), each said transceiver having a transmitter and a receiver, one of said transceivers being structured and configured as a master device (fig. 2 box 206), said master device structured and configured to manage data transmission between said master device and

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said at least two other transceivers (fig. 2 box 102A,B) and direct data transmission between said at least two other transceivers (bandwidth requirements for links 204 depend upon processor 206, col. 5 line 67 - col. 6 line 2), wherein said transmitters are structured and configured to emit radio frequency pulses operating with ultra-wide band wireless technology and said receivers are structured and configured to receive said radio pulses (col. 4 line 35 - 37).

Regarding claims 51 and 121, nothing in the prior art of the record teaches or fairly suggests a MAC hardware interface comprising a multiplexer/demultiplier unit, in combination with all the other limitations listed in the claim.

Regarding claim 106, nothing in the prior art of the record teaches or fairly suggests a master sync code, in combination with all the other limitations listed in the claim.

Regarding claim 113, nothing in the prior art of the record teaches or fairly suggests a master slot and command slot, in combination with all the other limitations listed in the claim.

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Regarding claims 113 and 118, nothing in the prior art of the record teaches or fairly suggests a protocol operating in slotted aloha mode, in combination with all the other limitations listed in the claim.

Regarding claims 135, 138, 139, 141, 143, 112, 129, 132, 134, and 136, nothing in the prior art of the record teaches or fairly suggests a local clock and master clock, in combination with all the other limitations listed in the claim.

#### ***Response to Arguments***

5. Applicant's arguments with respect to all independent claims have been considered but are moot in view of the new ground(s) of rejection. The examiner agrees with the applicant's argument that the reference to Paneth is not appropriate since the technology disclosed in Paneth is not ultra-wideband (pg. 20 last 2 paragraphs - pg. 21 1<sup>st</sup> paragraph). Therefore, a new search was performed.

#### ***Conclusion***

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to

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Ronald Abelson whose telephone number is (703) 306-5622.

The examiner can normally be reached on M-F.

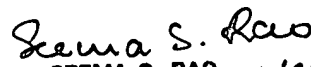
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Seema Rao can be reached on (703) 308-5463. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Ronald Abelson  
Examiner  
Art Unit 2666

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